

Listing of Claims:

1. (Previously Presented) An apparatus for use in a communication system comprising:

a receiver, including a plurality of receiver chains adapted for processing in the receiver, for receiving a pilot channel and determining a channel condition of said pilot channel; and

a control system for controlling receive diversity and power consumption of said receiver by selecting a number of said plurality of receiver chains based on said determined channel condition, wherein said control system is configured for reducing said number of selected receiver chains when said determined channel condition is above a first channel condition threshold.

2. (Cancelled)

3. (Original) The apparatus as recited in claim 1 wherein said control system is configured for increasing said number of selected receiver chains when said determined channel condition is below a second channel condition threshold.

4. (Previously Presented) The apparatus as recited in claim 1 wherein said control system is configured for increasing said number of selected receiver chains when said determined channel condition is below a second channel condition threshold, wherein said first channel condition threshold corresponds to a stronger channel condition than a channel condition corresponding to said second channel condition threshold.

5. (Original) The apparatus as recited in claim 4 wherein said control system is configured for adjusting a delta threshold corresponding to a difference between said first and second channel condition thresholds based on a mobility level of said receiver in said communication system.

6. (Original) The apparatus as recited in claim 5 wherein said control system is configured for increasing said delta threshold in response to an increasing mobility level and reducing said delta threshold in response to a decreasing mobility level.

7. (Previously Presented) A method for determining receive diversity in a receiver of a communication system comprising:

receiving a pilot channel at the receiver, using a plurality of receiver chains in the receiver, said receiver chains being adapted for processing in the receiver;

determining a channel condition of said pilot channel;

selecting a number of said plurality of receiver chains used for processing in the receiver based on said determined channel condition for controlling receive diversity and power consumption of said receiver; and

reducing said number of selected receiver chains when said determined channel condition is above a first channel condition threshold.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) The method as recited in claim 7 further comprising:

increasing said number of selected receiver chains when said determined channel condition is below a second channel condition threshold, wherein said first channel condition threshold corresponds to a stronger channel condition than a channel condition corresponding to said second channel condition threshold.

11. (Original) The method as recited in claim 10 further comprising:

adjusting a delta threshold corresponding to a difference between said first and second channel condition thresholds based on a mobility level of said receiver in said communication system.

12. (Original) The method as recited in claim 11 further comprising:

increasing said delta threshold in response to an increasing mobility level.

13. (Original) The method as recited in claim 11 further comprising:
reducing said delta threshold in response to a decreasing mobility level.

14. (Previously Presented) A method in a communication system for decoding a quick paging channel (QPCH) comprising:

determining a channel condition of a pilot channel received at a mobile station in said communication system;

determining receive diversity at a receiver of said mobile station by determining a number of a plurality of receiver chains of said receiver for receive diversity based on said determined channel condition;

determining a first data bit of said QPCH received at said mobile station in accordance with processing of one or more signals produced based on said determined receive diversity, wherein power consumption of said receiver is controlled based on said receive diversity.

15. (Original) The method as recited in claim 14 further comprising:
switching said mobile station to a sleep mode when said determined first data bit is a zero.

16. (Original) The method as recited in claim 14 further comprising:
determining a second data bit of said QPCH received at said mobile station when said determined first data bit is either a one or an erasure.

17. (Previously Presented) The method as recited in claim 16 further comprising:
directing resources of said mobile station to decode a received channel when said determined second data bit is either a one or an erasure.

18. (Previously Presented) The method as recited in claim 16 further comprising:
switching said mobile station to a sleep mode when said determined second data bit is a zero.

19. (Previously Presented) An apparatus for decoding a quick paging channel (QPCH) in a communication system comprising:

a receiver for determining a channel condition of a pilot channel received at a mobile station in said communication system;

a controller for determining receive diversity at said receiver by determining a number of a plurality of receiver chains of said receiver for receive diversity based on said determined channel condition, wherein a first data bit of said QPCH received at said receiver is determined in accordance with processing of one or more signals produced based on said determined receive diversity,

wherein power consumption of said receiver is controlled based on said receive diversity.

20. (Original) The apparatus as recited in claim 19 wherein said controller is configured to switch said mobile station to a sleep mode when said determined first data bit is a zero.

21. (Previously Presented) The apparatus as recited in claim 19 wherein, when said determined first data bit is either a one or an erasure, a second data bit of said QPCH received at said mobile station is determined, and said controller is configured for directing resources of said mobile station to decode a received channel when said determined second data bit is either a one or an erasure and switching said mobile station to a sleep mode when said determined second data bit is a zero.

22. (Previously Presented) A method for decoding a quick paging channel (QPCH) in a communication system comprising:

determining a first data bit of said QPCH received at a receiver, including a plurality of receiver chains for receive diversity, in a mobile station in said communication system;

determining receive diversity at said receiver of said mobile station when said determined first data bit is a one or an erasure, wherein said determining said receive diversity includes determining a number of said plurality of receiver chains for receive diversity based on a channel condition of a pilot channel received at said receiver,

wherein power consumption of said receiver is controlled based on said receive diversity.

23. (Cancelled)

24. (Original) The method as recited in claim 22 further comprising:

switching said mobile station to a sleep mode when said determined first data bit is a zero.

25. (Previously Presented) The method as recited in claim 22 further comprising:

determining a second bit of said QPCH received at said receiver in accordance with a receive processing of said determined receive diversity;

directing said mobile station resources to receive a receive channel when said determined second bit is either a one or an erasure.

26. (Previously Presented) The method as recited in claim 22 further comprising:

determining a second bit of said QPCH received at said receiver in accordance with a processing of said determined receive diversity; switching said mobile station to a sleep mode when said determined second data bit is a zero.

27. (Previously Presented) An apparatus for decoding a quick paging channel (QPCH) in a mobile station in a communication system comprising:

a receiver for determining a first data bit of said QPCH, wherein said receiver includes a plurality of receiver chains for receive diversity; and

a control system for selecting a number of said plurality of receiver chains for receive diversity based on a channel condition of a pilot channel received at said receiver,

wherein power consumption of said receiver is controlled based on said receive diversity.

28. (Original) The apparatus as recited in claim 27 wherein said control system switches said mobile station to a sleep mode when said determined first data bit is a zero.

29. (Canceled)

30. (Previously Presented) The apparatus as recited in claim 27 wherein said receiver determines a second bit of said QPCH in accordance with a receive processing of said determined receive diversity, and said control system directs said mobile station resources to receive a receive channel when said determined second bit is either a one or an erasure.

31. (Previously Presented) The apparatus as recited in claim 27 wherein said receiver determines a second bit of said QPCH in accordance with a processing of said determined receive diversity, and said control system switches said mobile station to a sleep mode when said determined second data bit is a zero.

32. (Previously Presented) A method for decoding a quick paging channel (QPCH) in a communication system comprising:

- determining a first data bit of said QPCH received at a receiver, including a plurality of receiver chains for receive diversity, in a mobile station in said communication system;

- switching said mobile station to a sleep mode when said determined first data bit is a zero;

- determining a second bit of said QPCH received at said receiver when said first data bit of said QPCH is either a one or an erasure;

- determining receive diversity at said receiver of said mobile station when said determined second data bit is an erasure based on a channel condition of pilot channel received at said receiver;

- directing said mobile station resources to receive a receive channel when said determined second data bit is a one,

- wherein power consumption of said receiver is controlled based on said receive diversity.

33. (Original) The method as recited in claim 32 further comprising:

- directing said mobile station resources to receive a receive channel, after said determining receive diversity at said receiver, in accordance with a receive processing of said determined receive diversity.

34. (Previously Presented) An apparatus for decoding a quick paging channel (QPCH) in a mobile station of a communication system, the apparatus comprising:

a receiver for determining a first data bit of said QPCH received at said receiver, wherein said receiver includes a plurality of receiver chains for receive diversity, and for determining a second data bit of said QPCH received at said receiver when said first data bit of said QPCH is either a one or an erasure;

a control system for switching said mobile station to a sleep mode when said determined first data bit is a zero, for determining receive diversity at said receiver when said determined second data bit is an erasure based on a channel condition of pilot channel received at said receiver, and for directing resources of said mobile station to receive a receive channel when said determined second data bit is a one,

wherein power consumption of said receiver is controlled based on said receive diversity.

35. (Original) The apparatus as recited in claim 34 wherein said control system is for directing said mobile station resources to receive a receive channel, after said determining receive diversity at said receiver, in accordance with a receive processing of said determined receive diversity.

36. (Previously Presented) A method for decoding a quick paging channel (QPCH) in a communication system comprising:

determining a first data bit of said QPCH received at a receiver, including a plurality of receiver chains for receive diversity, in a mobile station in said communication system;

switching said mobile station to a sleep mode when said determined first data bit is a zero;

determining a second bit of said QPCH received at said receiver when said first data bit of said QPCH is a one;

determining first receive diversity at said receiver of said mobile station when said determined first data bit is an erasure based on a channel condition of pilot channel received at said receiver and determining said second bit of said QPCH received at said receiver in accordance with said determined first receive diversity,

wherein power consumption of said receiver is controlled based on said receive diversity.

37. (Original) The method as recited in claim 36 further comprising:

directing said mobile station resources to receive a receive channel when said determined second data bit is a one.

38. (Previously Presented) The method as recited in claim 36 further comprising:

determining second receive diversity at said receiver of said mobile station when said determined second data bit is an erasure based on a channel condition of the pilot channel received at said receiver and directing resources of said mobile station to receive a receive channel, after said determining second receive diversity at said receiver, in accordance with a receive processing of said determined second receive diversity.

39. (Previously Presented) An apparatus for decoding a quick paging channel (QPCH) in a communication system comprising:

a receiver for determining a first data bit of said QPCH received at said receiver, including a plurality of receiver chains for receive diversity, in a mobile station in said communication system and determining a second bit of said QPCH received at said receiver when said first data bit of said QPCH is a one;

a control system for switching said mobile station to a sleep mode when said determined first data bit is a zero and for determining first receive diversity at said receiver of said mobile station when said determined first data bit is an erasure based on a channel condition of pilot channel received at said receiver, and wherein said receiver determines said second bit of said QPCH received at said receiver in accordance with said determined first receive diversity,

wherein power consumption of said receiver is controlled based on said receive diversity.

40. (Original) The apparatus as recited in claim 39 wherein said control system directs said mobile station resources to receive a receive channel when said determined second data bit is a one.

41. (Previously Presented) The apparatus as recited in claim 39 wherein said control system determines second receive diversity at said receiver of said mobile station when said

determined second data bit is an erasure based on a channel condition of pilot channel received at said receiver and directing resources of said mobile station to receive a receive channel, after said determining second receive diversity at said receiver, in accordance with a receive processing of said determined second receive diversity.

42. (Previously Presented) An apparatus for use in a communication system comprising:

means for receiving a pilot channel and determining a channel condition of said pilot channel;

means for controlling receive diversity and power consumption of a receiver based on said determined channel condition; and

reducing a number of receiver chains when said determined channel condition is above a first channel condition threshold.

43. (Previously Presented) A computer-readable storage medium storing instructions for determining receive diversity in a receiver of a communication system, the instructions comprising code for:

receiving a pilot channel at the receiver, using a plurality of receiver chains in the receiver, said receiver chains being adapted for processing in the receiver;

determining a channel condition of said pilot channel;

selecting a number of said plurality of receiver chains used for processing in the receiver based on said determined channel condition for controlling receive diversity and power consumption of said receiver; and

reducing said number of selected receiver chains when said determined channel condition is above a first channel condition threshold.

44. (Cancelled)

45. (Cancelled)

46. (Previously Presented) The computer-readable storage medium as recited in claim 43, the instructions comprising code for:

increasing said number of selected receiver chains when said determined channel condition is below a second channel condition threshold and

reducing said number of selected receiver chains when said determined channel condition is above a first channel condition threshold, wherein said first channel condition threshold corresponds to a stronger channel condition than a channel condition corresponding to said second channel condition threshold.

47. (Previously Presented) The computer-readable storage medium as recited in claim 46, the instructions comprising code for:

adjusting a delta threshold corresponding to a difference between said first and second channel condition thresholds based on a mobility level of said receiver in said communication system.

48. (Previously Presented) The computer-readable storage medium as recited in claim 47, the instructions comprising code for:

increasing said delta threshold in response to an increasing mobility level.

49. (Previously Presented) The computer-readable storage medium as recited in claim 47, the instructions comprising code for:

reducing said delta threshold in response to a decreasing mobility level.

50. (Previously Presented) A processor for determining receive diversity in a receiver of a communication system, the processor comprising:

means for receiving a pilot channel and determining a channel condition of said pilot channel;

means for controlling receive diversity and power consumption of said receiver based on said determined channel condition; and

reducing a number of receiver chains when said determined channel condition is above a first channel condition threshold.